<u>DI MIXED – 5</u>

During a particular year, five movies – A through E – were released in the four regions of a country – North, South, East and West. Each movie was ranked from 1 to 5 in each region, in the descending order of the box office collections of the movie in that region. In any region, no two movies had the same box office collections. The bar graph below provides the box office collections of four of the five movies, A, B, C and D, in each the four regions – North, South, East and West. The table adjacent to the bar graph provides the sum of the ranks obtained by these four movies in the four regions.



- 1. What is the sum of the ranks obtained by E across the four regions?
- 2. In how many of the four regions was B's rank better, i.e., numerically lower, than that of E?
- Which of the following can be the total box office collections of E in East and South combined?
 a) ₹320 mn
 b) ₹300 mn
 c) ₹260 mn
 d) ₹200 mn
- 4. Which of the following statements is definitely true?
 - a) The box office collections of E across the four regions combined is greater than ₹540 mn.
 - b) The box office collections of E across the four regions combined is less than ₹540 mn.
 - c) The box office collections of E across the four regions combined is greater than ₹640 mn.
 - d) The box office collections of E across the four regions combined is less than ₹640 mn.
- 5. Which of the following can be the box office collections of E in North?
 a) ₹170 mn
 b) ₹150 mn
 c) ₹135 mn
 d) ₹70 mn

DIRECTIONS *for questions :* The graphs below give details about the operations of company XYZ from 2014-15 to 2018-19. The company started operations in 2014-15 with liquid assets worth ₹20 million at the beginning of the year.





- Total Cost in a year = Total Fixed Cost in that year + Total Variable Cost in that year
- Profit in a year = Total Revenue from sales in that year Total Cost in that year
- Liquid Assets at the end of a year = Liquid Assets at the beginning of the year + Profit in that year.
- At the end of which year was the percentage increase in liquid assets over the previous year, the highest?
 a) 2015-16
 b) 2016-17
 c) 2017-18
 d) 2018-19
- 7. The liquid assets with the company at the end of 2018-19 were ₹
- 8.During which year was the variable cost per unit produced, the highest?a) 2015-16b) 2016-17c) 2017-18d) 2018-19

9.	At the end of whic	h year was the cu	mulative unsold stock the h	ighest?
	a) 2017-18	b) 2016-17	c) 2015-16	d) 2014-15

10. Had the company sold all the units and only those units it produced in a year in that year itself, the liquid assets (in ₹ million) at the end of 2018-19 would have been approximately

	a) 47	b) 52	c) 59	d) 66
--	-------	-------	-------	-------

DIRECTIONS:

Four persons, A through D, work in the same office. The graph below provides the number of days that each person worked in each month from February 2019 to May 2019 as a percentage of the total number of days that he worked during that period. The number of days that any person worked in any month is not necessarily an integer.



- 11. During the given period, the number of days (approximately) that any person worked is not more than? a) 106.9 b) 120 c) 115.3 d) 100
- 12. What is the difference between the maximum number of days that A could have worked in March 2019 and the maximum number of days that B could have worked in February 2019? a) 2.5 b) 5 c) 10 d) 3
- 13. If in a particular month during the given period each person worked on exactly 10 days in that month, which of the following months can it be a) February b) March c) May d) More than one of the above
- 14. In at most how many of the four months given is it possible that at least one of the four persons could have worked on all the days of that month? d) 4
 - a) 1 b) 2 c) 3